



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,516	10/05/2003	Igor V. Touzov		2515
34185	7590	05/31/2007		
IGOR V TOUZOV 212 CRESTONE DRIVE CARY, NC 27513			EXAMINER PHAM, HOA Q	
			ART UNIT 2886	PAPER NUMBER
			MAIL DATE 05/31/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/605,516	Applicant(s) TOUZOV, IGOR V.	
	Examiner Hoa Q. Pham	Art Unit 2886	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/5/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election in the reply filed on 3/1/07 is acknowledged. Because applicant did not include an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143), the election has been treated as an election without traverse (MPEP § 818.03(a)). However, since applicant amends claims 13, 16, and 19 dependent on claims 1, 13 and 16, respectively; therefore, all the claims (1-20) will be examined as below.

Drawings

2. The drawings filed on 10/5/03 have been accepted.

Claim Objections

3. Claims 1-20 are objected to because of the following informalities:
- a. The claims do not include a ";" after each sentence, for example, claim 1, line 6, a ";" should be inserted at the end.
 - b. It is suggested that the language "comprising steps of:" should be used in the method claims. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2886

5. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 1, line 5, has no antecedent basis for "video source".

b. Claims 4-5 are "apparatus claims" which depend on method claim 1; however, there is no relationship between the elements of apparatus claims with respect to the steps in method claim.

c. Claim 6 has the same problem as of claims 1 and 4-5. There is no connection between the "light source", "optical elements" and "capture device" and steps ii), iii) and iv).

d. Claims 9-10 has the same problem as of claims 4-5 above.

e. Claim 12, line 1 is confused; what does applicant means by "Apparatus of claim 9 or clam[claim] 10 further implementing method of claim 10"?

f. Claim 13, line 2 has no antecedent basis for "micromechanical or micro electromechanical elements". In addition, there is no connection between claims 13 and claim 1.

g. Claim 14 has similar problem as claim 13.

h. Claim 15 depends on claim 6 and disclose "a second method for measuring deformation of plurality of microcantilevers", thus, the claim fails to further limit the subject matter of claim 6.

i. Claims 16 and 19-20 disclose an apparatus claim which depends on claim 13; however, there is no connection between claims 16 and 13.

j. Claims 17-18 have the same problem as in claim 15 which discloses two methods in one claim.

K. Claims 2-3, 7-8, 11 are dependent; therefore, inherit the deficiencies of the claims on which they depend.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thirion et al (2002/0012478).

Regarding claims 1-3, 6-8, Thirion et al discloses an image processing electronic device for detecting dimensional variations in which digital image of the same region taken at different times are compared and it is inherent that the comparison uses at least one pixel from said first image fragment and at least one different pixel from said second image fragment. Thirion et al does not explicitly teach that the image is from a video source; however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the basic device of Thirion et al for extracting the image fragments from video source or digital video stream because the device would function in the same manner.

Regarding claims 4-5, 9-10, 12-14, and 16-20 are apparatus claims which depend on method claims; therefore, the patentable weight is not given and are rejected according to the method claims.

Regarding claim 11, see paragraph [0004] for the use of x-ray scanner.

Regarding claim 15, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the method of Thirion et al to determine the deformations of a plurality of microcantilevers because it does not matter what types of object to be tested is, the device would using the same method.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tannenbaum et al (6,535,623) teaches the comparison between the identical locations of image data in different time images and Japan reference (JP-2000-165519) discloses step of comparing image data of same area at different photography time.

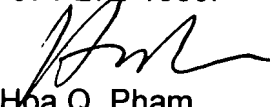
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (571) 272-2426. The examiner can normally be reached on Monday through Friday, 8:00AM TO 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifur Chowdhury can be reached on (571) 272-2287. The fax phone

Art Unit: 2886

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Hoa Q. Pham
Primary Examiner
Art Unit 2886

HP
May 28, 2007